Appendix A: Proposed Rules

Parts 2, 25 and 97 of title 47 of the Code of Federal Regulations are proposed to be amended as follows:

PART 2 -- FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

1. The authority citation for Part 2 continues to read as follows:

AUTHORITY: Sec. 4, 302, 303, and 307 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154, 302, 303 and 307, unless otherwise noted.

2. Section 2.106, the Table of Frequency Allocations, is amended as follows:

a. Remove the existing entries for 1610-1626.5 MHz, 2483.5-2500 MHz, 5000-5250 MHz, 5850-7075 MHz (5850-7125 MHz in column 4 only), 15.4-15.7 GHz, 17.7-20.2 GHz, and 27.5-30.0 GHz in columns (1) through (7).

b. Add entries in numerical order for 1610-1626.5 MHz, 2483.5-2500 MHz, 5000-5250 MHz, 5850-7075 MHz (5850-7125 MHz in column 4 only), 15.4-15.7 GHz, 17.7-20.2 GHz, and 27.5-30.0 GHz in columns (1) through (7).

c. In the International Footnotes under heading I., add footnotes S5.149, S5.341, S5.355, S5.359, S5.363, S5.364, S5.365, S5.366, S5.367, S5.368, S5.369, S5.370, S5.371, S5.372, S5.397, S5.398, S5.399, S5.400, S5.402, S5.440, S5.441, S5.441A, S5.444, S5.444A, S5.446, S5.447, S5.447A, S5.447B, S5.447C, S5.458, S5.458A, S5.458B, S5.458C, S5.511A, S5.511C, and S5.511D.

d. In the International Footnotes under heading II., remove footnotes 731E, 731F, 732, 733, 733A, 733B, 733C, 733E, 733F, 753A, 753B, 753C, 753F, 796, 797, 797A, 797B, and 809.

e. Revise US319.

f. Revise NG147.

g. Add G126.

§ 2.106 Table of Frequency Allocations

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International table			United States table		FCC use designators	
Region 1 -- allocation MHz	Region 2 -- allocation MHz	Region 3 -- allocation MHz	Government	Non-Government	Rule part(s)	Special-use frequencies
			Allocation MHz	Allocation MHz		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
*	*	*	*	*	*	*
1610 – 1610.6 MOBILE-SATELLITE (Earth-to-space) AERONAUTICAL RADIONAVIGATION S5.341 S5.355 S5.359 S5.363 S5.364 S5.366 S5.367 S5.368 S5.369 S5.371 S5.372	1610 – 1610.6 MOBILE-SATELLITE (Earth-to-space) AERONAUTICAL RADIONAVIGATION RADIODETERMINATION-SATELLITE (Earth-to-space) S5.341 S5.364 S5.366 S5.367 S5.368 S5.370 S5.372	1610 – 1610.6 MOBILE-SATELLITE (Earth-to-space) AERONAUTICAL RADIONAVIGATION Radiodetermination-Satellite (Earth-to-space) S5.341 S5.355 S5.359 S5.364 S5.366 S5.367 S5.368 S5.369 S5.372	1610 – 1610.6 AERONAUTICAL RADIONAVIGATION US260 RADIODETERMINATION-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) US319 S5.341 S5.364 S5.366 S5.367 S5.368 S5.372 US208	1610 – 1610.6 AERONAUTICAL RADIONAVIGATION US260 RADIODETERMINATION-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) US319 S5.341 S5.364 S5.366 S5.367 S5.368 S5.372 US208	AVIATION (87) SATELLITE COMMUNICATIONS (25)	
1610.6 – 1613.8 MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY AERONAUTICAL RADIONAVIGATION S5.149 S5.341 S5.355 S5.359 S5.363 S5.364 S5.366 S5.367 S5.368 S5.369 S5.371 S5.372	1610.6 – 1613.8 MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY AERONAUTICAL RADIONAVIGATION RADIODETERMINATION-SATELLITE (Earth-to-space) S5.149 S5.341 S5.364 S5.366 S5.367 S5.368 S5.370 S5.372	1 610.6 – 1 613.8 MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY AERONAUTICAL RADIONAVIGATION Radiodetermination-Satellite (Earth-to-space) S5.149 S5.341 S5.355 S5.359 S5.364 S5.366 S5.367 S5.368 S5.369 S5.372	1610.6 – 1613.8 AERONAUTICAL RADIONAVIGATION US260 RADIODETERMINATION-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) US319 RADIO ASTRONOMY S5.149 S5.341 S5.364 S5.366 S5.367 S5.368 S5.372 US208	1610.6 – 1613.8 AERONAUTICAL RADIONAVIGATION US260 RADIODETERMINATION-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) US319 RADIO ASTRONOMY S5.149 S5.341 S5.364 S5.366 S5.367 S5.368 S5.372 US208	AVIATION (87) SATELLITE COMMUNICATIONS (25)	

International table			United States table		FCC use designators	
Region 1 -- allocation MHz	Region 2 -- allocation MHz	Region 3 -- allocation MHz	Government	Non-Government	Rule part(s)	Special-use frequencies
			Allocation MHz	Allocation MHz		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1613.8 – 1626.5 MOBILE-SATELLITE (Earth-to-space) AERONAUTICAL RADIONAVIGATION Mobile-Satellite (space-to-Earth) S5.341 S5.355 S5.359 S5.363 S5.364 S5.365 S5.366 S5.367 S5.368 S5.369 S5.371 S5.372	1613.8 – 1626.5 MOBILE-SATELLITE (Earth-to-space) AERONAUTICAL RADIONAVIGATION RADIODETERMINATION-SATELLITE (Earth-to-space) Mobile-Satellite (space-to-Earth) S5.341 S5.364 S5.365 S5.366 S5.367 S5.368 S5.370 S5.372	1613.8 – 1626.5 MOBILE-SATELLITE (Earth-to-space) AERONAUTICAL RADIONAVIGATION Mobile-Satellite (space-to-Earth) Radiodetermination-Satellite (Earth-to-space) S5.341 S5.355 S5.359 S5.364 S5.365 S5.366 S5.367 S5.368 S5.369 S5.372	1613.8 – 1626.5 AERONAUTICAL RADIONAVIGATION US260 RADIODETERMINATION-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) US319 Mobile-Satellite (space-to-Earth) S5.341 S5.364 S5.365 S5.366 S5.367 S5.368 S5.372 US208	1613.8 – 1626.5 AERONAUTICAL RADIONAVIGATION US260 RADIODETERMINATION-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) US319 Mobile-Satellite (space-to-Earth) S5.341 S5.364 S5.365 S5.366 S5.367 S5.368 S5.372 US208	AVIATION (87) SATELLITE COMMUNICATIONS (25)	
*	*	*	*	*	*	*
2483.5 – 2500 FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) Radiolocation S5.150 S5.371 S5.397 S5.398 S5.399 S5.400 S5.402	2483.5 – 2500 FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) RADIOLOCATION RADIODETERMINATION-SATELLITE (space-to-Earth) S5.398 S5.150 S5.402	2483.5 – 2500 FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) RADIOLOCATION Radiodetermination-Satellite (space-to-Earth) S5.398 S5.150 S5.400 S5.402	2483.5 – 2500 MOBILE-SATELLITE (space-to-Earth) US319 RADIODETERMINATION-SATELLITE (space-to-Earth) S5.398 S5.150 S5.402 US41 NG147	2483.5 – 2500 MOBILE-SATELLITE (space-to-Earth) US319 RADIODETERMINATION-SATELLITE (space-to-Earth) S5.398 S5.150 S5.402 US41 NG147	SATELLITE COMMUNICATIONS (25)	2450 ± 50 MHz: Industrial, scientific, and medical frequency
*	*	*	*	*	*	*

International table			United States table		FCC use designators	
Region 1 -- allocation MHz	Region 2 -- allocation MHz	Region 3 -- allocation MHz	Government	Non-Government	Rule part(s)	Special-use frequencies
			Allocation MHz	Allocation MHz		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
5000 – 5150 AERONAUTICAL RADIONAVIGATION S5.367 S5.444 S5.444A			5000 – 5250 AERONAUTICAL RADIONAVIGATION US260	5000 – 5150 AERONAUTICAL RADIONAVIGATION US260 S5.367 S5.444 S5.444A US211	AVIATION (87) SATELLITE COMMUNICATIONS (25)	
5150 – 5250 AERONAUTICAL RADIONAVIGATION FIXED-SATELLITE (Earth-to-space) S5.447A S5.446 S5.447 S5.447B S5.447C			S5.367 S5.444 US211 US307 G126	5150 – 5250 AERONAUTICAL RADIONAVIGATION US260 FIXED-SATELLITE (Earth-to-space) S5.447A S5.447C US211 US307	AVIATION (87) SATELLITE COMMUNICATIONS (25)	
*	*	*	*	*	*	*
5850 – 5925 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE S5.150	5850 – 5925 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Amateur Radiolocation S5.150	5850 – 5925 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Radiolocation S5.150	5850 – 5925 RADIOLOCATION S5.150 US245 G2	5850 – 5925 FIXED-SATELLITE (Earth-to-space) Amateur S5.150 US245	Amateur (97)	

International table			United States table		FCC use designators	
Region 1 -- allocation MHz	Region 2 -- allocation MHz	Region 3 -- allocation MHz	Government	Non-Government	Rule part(s)	Special-use frequencies
(1)	(2)	(3)	Allocation MHz (4)	Allocation MHz (5)	(6)	(7)
5925 – 6700 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE S5.149 S5.440 S5.458			5925 – 7125 S5.149 S5.440 S5.458	5925 – 6425 FIXED NG41 FIXED-SATELLITE (Earth-to-space)	FIXED MICROWAVE SERVICES (101) SATELLITE COMMUNICATIONS (25)	
				6425 – 6525 FIXED-SATELLITE (Earth-to-space) MOBILE S5.440 S5.458	AUXILIARY BROADCASTING (74) CABLE TELEVISION RELAY (78) FIXED MICROWAVE SERVICES (101)	
				6525 – 6700 FIXED FIXED-SATELLITE (Earth-to-space) S5.149 S5.458	FIXED MICROWAVE SERVICES (101) SATELLITE COMMUNICATIONS (25)	
6700 – 7075 FIXED FIXED-SATELLITE (Earth-to-space)(space-to-Earth) S5.441 MOBILE S5.458 S5.458A S5.458B				6700 – 6875 FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) S5.441 S5.458 S5.458A S5.458B	FIXED MICROWAVE SERVICES (101) SATELLITE COMMUNICATIONS (25)	
				6875 – 7075 FIXED FIXED-SATELLITE (Earth-to-space)(space-to-Earth) S5.441 MOBILE S5.458 S5.458A S5.458B S5.458C NG118	AUXILIARY BROADCASTING (74) CABLE TELEVISION RELAY (78) FIXED MICROWAVE SERVICES (101) SATELLITE COMMUNICATIONS (25)	

International table			United States table		FCC use designators	
Region 1 -- allocation GHz	Region 2 -- allocation GHz	Region 3 -- allocation GHz	Government	Non-Government	Rule part(s)	Special-use frequencies
(1)	(2)	(3)	Allocation GHz (4)	Allocation GHz (5)	(6)	(7)
*	*	*	*	*	*	*
15.4 – 15.43 AERONAUTICAL RADIONAVIGATION S5.511D			15.4 – 15.7 AERONAUTICAL RADIONAVIGATION US260	15.4 – 15.43 AERONAUTICAL RADIONAVIGATION US260 US211	AVIATION (87)	
15.43 – 15.63 FIXED-SATELLITE (space-to-Earth)(Earth-to-space) S5.511A AERONAUTICAL RADIONAVIGATION S5.511C				15.43 – 15.63 FIXED-SATELLITE (space-to-Earth)(Earth-to-space) S5.511A AERONAUTICAL RADIONAVIGATION US260 S5.511C US211	AVIATION (87) SATELLITE COMMUNICATIONS (25)	
15.63 – 15.7 AERONAUTICAL RADIONAVIGATION S5.511D			US211	15.63 – 15.7 AERONAUTICAL RADIONAVIGATION US260 US211	AVIATION (87)	
*	*	*	*	*	*	*

INTERNATIONAL FOOTNOTES

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S5.149 In making assignments to stations of other services to which the bands:

13360 - 13410 kHz,	4950 - 4990 MHz,	93.07 - 93.27 GHz*,
25550 - 25670 kHz,	4990 - 5000 MHz,	97.88 - 98.08 GHz*,
37.5 - 38.25 MHz,	6650 - 6675.2 MHz*,	140.69 - 140.98 GHz*,
73 - 74.6 MHz in	10.6 - 10.68 GHz,	144.68 - 144.98 GHz*,
Regions 1 and 3,	14.47 - 14.5 GHz*,	145.45 - 145.75 GHz*,
150.05 - 153 MHz in	22.01 - 22.21 GHz*,	146.82 - 147.12 GHz*,
Region 1,	22.21 - 22.5 GHz,	150 - 151 GHz*,
322 - 328.6 MHz*,	22.81 - 22.86 GHz*,	174.42 - 175.02 GHz*,
406.1 - 410 MHz,	23.07 - 23.12 GHz*,	177 - 177.4 GHz*,
608 - 614 MHz in	31.2 - 31.3 GHz,	178.2 - 178.6 GHz*,
Regions 1 and 3,	31.5 - 31.8 GHz in	181 - 181.46 GHz*,
1330 - 1400 MHz*,	Regions 1 and 3,	186.2 - 186.6 GHz*,
1610.6 - 1613.8 MHz*,	36.43 - 36.5 GHz*,	250 - 251 GHz*,
1660 - 1670 MHz,	42.5 - 43.5 GHz,	257.5 - 258 GHz*,
1718.8 - 1722.2 MHz*,	42.77 - 42.87 GHz*,	261 - 265 GHz,
2655 - 2690 MHz,	43.07 - 43.17 GHz*,	262.24 - 262.76 GHz*,
3260 - 3267 MHz*,	43.37 - 43.47 GHz*,	265 - 275 GHz,
3332 - 3339 MHz*,	48.94 - 49.04 GHz*,	265.64 - 266.16 GHz*,
3345.8 - 3352.5 MHz*,	72.77 - 72.91 GHz*,	267.34 - 267.86 GHz*,
4825 - 4835 MHz*,		271.74 - 272.26 GHz*

are allocated (* indicates radio astronomy use for spectral line observations), administrations are urged to take all practicable steps to protect the radio astronomy service from harmful interference. Emissions from spaceborne or airborne stations can be particularly serious sources of interference to the radio astronomy service (see Nos. 343/S4.5 and 344/S4.6 and Article 36/S29).

* * * * *

S5.341 In the bands 1400-1727 MHz, 101-120 GHz and 197-220 GHz, passive research is being conducted by some countries in a programme for the search for intentional emissions of extraterrestrial origin.

S5.355 Additional allocation: in Saudi Arabia, Bahrain, Bangladesh, the Congo, Egypt, the United Arab Emirates, Eritrea, Ethiopia, the Islamic Republic of Iran, Iraq, Israel, Jordan, Kuwait, the Lebanon, Malta, Morocco, Niger, Oman, Qatar, Syria, Somalia, Sudan, Sri Lanka, Chad, Togo, Yemen and Zambia, the bands 1540-1645.5 MHz and 1646.5-1660 MHz are also allocated to the fixed service on a secondary basis.

S5.359 Additional allocation: in Germany, Saudi Arabia, Armenia, Austria, Azerbaijan, Belarus, Benin, Bulgaria, Cameroon, Spain, France, Gabon, Georgia, Greece, Guinea, Guinea-Bissau, Hungary, Jordan, Kazakhstan, Kuwait, Latvia, Libya, Mali, Mauritania, Moldova, Mongolia, Nigeria, Uganda, Uzbekistan, Pakistan, Poland, Syria, Kyrgyzstan, the Democratic People's Republic of Korea, Romania, Russia, Senegal, Swaziland, Tajikistan, Tanzania, Turkmenistan, Ukraine, Zambia and Zimbabwe the bands 1550-1645.5 MHz and 1646.5-1660 MHz are also allocated to the fixed service on a primary basis. Administrations are urged to make all practicable efforts to avoid the implementation of new fixed-service stations in the bands 1550-1555 MHz, 1610-1645.5 MHz and 1646.5-1660 MHz.

S5.363 Alternative allocation: in Sweden, the band 1590-1626.5 MHz is allocated to the aeronautical radionavigation service on a primary basis.

S5.364 The use of the band 1610-1626.5 MHz by the mobile-satellite service (Earth-to-space) and by the radiodetermination-satellite service (Earth-to-space) is subject to coordination under Resolution 46 (Rev.WRC-95)/No. S9.11A. A mobile earth station operating in either of the services in this band shall not produce a peak e.i.r.p. density in excess of -15 dB(W/4 kHz) in the part of the band used by systems operating in accordance with the provisions of No. S5.366 (to which No. 953/S4.10 applies), unless otherwise agreed by the affected administrations. In the part of the band where such systems are not operating, the mean e.i.r.p. density of a mobile earth station shall not exceed -3 dB(W/4 kHz). Stations of the mobile-satellite service shall not claim protection from stations in the aeronautical radionavigation service, stations operating in accordance with the provisions of No. S5.366 and stations in the fixed service operating in accordance with the provisions of No. S5.359. Administrations responsible for the coordination of mobile-satellite networks shall make all practicable efforts to ensure protection of stations operating in accordance with the provisions of No. S5.366.

S5.365 The use of the band 1613.8-1626.5 MHz by the mobile-satellite service (space-to-Earth) is subject to coordination under Resolution 46 (Rev.WRC-95)/No. S9.11A.

S5.366 The band 1610-1626.5 MHz is reserved on a worldwide basis for the use and development of airborne electronic aids to air navigation and any directly associated ground-based or satellite-borne facilities. Such satellite use is subject to agreement obtained under Article 14/No. S9.21.

S5.367 Additional allocation: the bands 1610-1626.5 MHz and 5000-5150 MHz are also allocated to the aeronautical mobile-satellite (R) service on a primary basis, subject to agreement obtained under Article 14/No. S9.21.

S5.368 With respect to the radiodetermination-satellite and mobile-satellite services the provisions of No. 953/S4.10 do not apply in the band 1610-1626.5 MHz, with the exception of the aeronautical radionavigation-satellite service.

S5.369 Different category of service: in Angola, Australia, Burundi, Côte d'Ivoire, Eritrea, Ethiopia, India, the Islamic Republic of Iran, Israel, Jordan, Lebanon, Liberia, Libya, Madagascar, Mali, Pakistan, Papua New Guinea, Syria, Senegal, Sudan, Swaziland, Togo, Zaire and Zambia the allocation of the band 1610-1626.5 MHz to the radiodetermination-satellite service (Earth-to-space) is on a primary basis (see No. S5.33) subject to agreement obtained under Article 14/No. S9.21 from countries not listed in this provision.

S5.370 Different category of service: in Venezuela, the allocation to the radiodetermination-satellite service in the band 1610-1626.5 MHz (Earth-to-space) is on a secondary basis.

S5.371 Additional allocation: in Region 1, the bands 1610-1626.5 MHz (Earth-to-space) and 2483.5-2500 MHz (space-to-Earth) are also allocated to the radiodetermination-satellite service on a secondary basis, subject to agreement obtained under Article 14/No. S9.21.

S5.372 Harmful interference shall not be caused to stations of the radio astronomy service using the band 1610.6-1613.8 MHz by stations of the radiodetermination-satellite and mobile-satellite services (No. 2904/S29.13 applies).

* * * * *

S5.397 Additional allocation: in France, the band 2450-2500 MHz is allocated on a primary basis to the radiolocation service (see No. S5.33). Such use is subject to agreement with administrations having services operating or planned to operate in accordance with the Table of Frequency Allocations which may be affected.

S5.398 In respect of the radiodetermination-satellite service in the band 2483.5-2500 MHz, the provisions of No. 953/S4.10 do not apply.

S5.399 In Region 1, in countries other than those listed in S5.400 , harmful interference shall not be caused to, or protection shall not be claimed from, stations of the radiolocation service by stations of the radiodetermination-satellite service.

S5.400 Different category of service: in Angola, Australia, Bangladesh, Burundi, China, Eritrea, Ethiopia, India, the Islamic Republic of Iran, Jordan, Lebanon, Liberia, Libya, Madagascar, Mali, Pakistan, Papua New Guinea, Syria, Sudan, Swaziland, Togo, Zaire and Zambia, the allocation of the band 2483.5-2500 MHz to the radiodetermination-satellite service (space-to-Earth) is on a primary basis (see No. S5.33) subject to agreement obtained under No. S9.21 from countries not listed in this provision.

S5.402 The use of the band 2483.5-2500 MHz by the mobile-satellite and the radiodetermination-satellite services is subject to the coordination under Resolution 46 (Rev.WRC-95)/No. S9.11A. Administrations are urged to take all practicable steps to prevent harmful interference to the radio astronomy service from emissions in the 2483.5-2500 MHz

band, especially those caused by second-harmonic radiation that would fall into the 4990-5000 MHz band allocated to the radio astronomy service worldwide.

S5.440 The standard frequency and time signal-satellite service may be authorized to use the frequency 4202 MHz for space-to-Earth transmissions and the frequency 6427 MHz for Earth-to-space transmissions. Such transmissions shall be confined within the limits of ± 2 MHz of these frequencies, subject to agreement obtained under Article 14/No. S9.21.

S5.441 The use of the bands 4500-4800 MHz (space-to-Earth) and 6725-7025 MHz (Earth-to-space) by the fixed-satellite service shall be in accordance with the provisions of Appendix S30B. The use of the bands 10.7-10.95 GHz (space-to-Earth), 11.2-11.45 GHz (space-to-Earth) and 12.75-13.25 GHz (Earth-to-space) by GSO satellite systems in the fixed-satellite service shall be in accordance with the provisions of Appendix S30B. The use of the bands 10.7-10.95 GHz (space-to-Earth), 11.2-11.45 GHz (space-to-Earth) and 12.75-13.25 GHz (Earth-to-space) by non-GSO satellite systems in the fixed-satellite service shall be in accordance with the provisions of Resolution COM5-18.

S5.441A The use of the bands 10.95-11.2 GHz (space-to-Earth), 11.45-11.7 GHz (space-to-Earth), 11.7-12.2 GHz (space-to-Earth) in Region 2, 12.2-12.75 GHz (space-to-Earth) in Region 3, 12.5-12.75 GHz (space-to-Earth) in Region 1, 13.75-14.5 GHz (Earth-to-space), 17.8-18.6 GHz (space-to-Earth), 19.7-20.2 GHz (space-to-Earth), 27.5-28.6 GHz (Earth-to-space), 29.5-30 GHz (Earth-to-space) by non-GSO and GSO satellite systems in the fixed-satellite service is subject to the provisions of Resolution COM5-18. The use of the band 17.8-18.1 GHz (space-to-Earth) by non-GSO FSS systems is also subject to the provisions of Resolution COM5-19.

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S5.444 The band 5000-5150 MHz is to be used for the operation of the international standard system (microwave landing system) for precision approach and landing. The requirements of this system shall take precedence over other uses of this band. For the use of this band, No. S5.444A and Resolution 114 (WRC-95) apply.

S5.444A Additional allocation: the band 5091-5150 MHz is also allocated to the fixed-satellite service (Earth-to-space) on a primary basis. This allocation is limited to feeder links of non-geostationary mobile-satellite systems and is subject to coordination under Resolution 46 (Rev.WRC-95)/No. S9.11A.

In the band 5091-5150 MHz, the following conditions also apply:

- prior to 1 January 2010, the use of the band 5091-5150 MHz by feeder links of non-geostationary-satellite systems in the mobile-satellite service shall be made in accordance with Resolution 114 (WRC-95)

- prior to 1 January 2010, the requirements of existing and planned international standard systems for the aeronautical radionavigation service which cannot be met in the 5000-5091 MHz band, shall take precedence over other uses of this band;

- after 1 January 2008, no new assignments shall be made to stations providing feeder links of non-geostationary-satellite mobile-satellite systems;

- after 1 January 2010, the fixed-satellite service will become secondary to the aeronautical radionavigation service.

S5.446 Additional allocation: in the countries listed in Nos. S5.369 and S5.400, the band 5150-5216 MHz is also allocated to the radiodetermination-satellite service (space-to-Earth) on a primary basis, subject to agreement obtained under Article 14/No. S9.21. In Region 2, the band is also allocated to the radiodetermination-satellite service (space-to-Earth) on a primary basis. In Regions 1 and 3, except those countries listed in Nos. S5.369 and S5.400, the band is also allocated to the radiodetermination-satellite service (space-to-Earth) on a secondary basis. The use by the radiodetermination-satellite service is limited to feeder links in conjunction with the radiodetermination-satellite service operating in the bands 1610-1626.5 MHz and/or 2483.5-2500 MHz. The total power flux-density at the Earth's surface shall in no case exceed –159 dBW/m^2 in any 4 kHz band for all angles of arrival.

S5.447 Additional allocation: in Germany, Austria, Belgium, Denmark, Spain, Finland, France, Greece, Israel, Italy, Japan, Jordan, Lebanon, Liechtenstein, Luxembourg, Malta, Morocco, Norway, Pakistan, the Netherlands, Portugal, Syria, the United Kingdom, Sweden, Switzerland and Tunisia, the band 5150-5250 MHz is also allocated to the mobile service, on a primary basis, subject to agreement obtained under Article 14/No. S9.21.

S5.447A The allocation to the fixed-satellite service (Earth-to-space) is limited to feeder links of non-geostationary-satellite systems in the mobile-satellite service and is subject to coordination under Resolution 46 (Rev.WRC-95)/No. S9.11A.

S5.447B Additional allocation: the band 5150-5216 MHz is also allocated to the fixed-satellite service (space-to-Earth) on a primary basis. This allocation is limited to feeder links of non-geostationary-satellite systems in the mobile-satellite service and is subject to provisions of Resolution 46 (Rev.WRC-95)/No. S9.11A. The power flux-density at the Earth's surface produced by space stations of the fixed-satellite service operating in the space-to-Earth direction in the band 5150-5216 MHz shall in no case exceed -164 $dB(W/m^2)$ in any 4 kHz band for all angles of arrival.

S5.447C Administrations responsible for fixed-satellite service networks in the band 5150-5250 MHz operated under Nos. S5.447A and S5.447B shall coordinate on an equal basis in accordance with Resolution 46 (Rev.WRC-95)/No. S9.11A with administrations responsible for non-geostationary-satellite networks operated under No. S5.446 and brought into use prior to 17 November 1995. Satellite networks operated under No. S5.446 brought into use after

17 November 1995 shall not claim protection from, and shall not cause harmful interference to, stations of the fixed-satellite service operated under Nos. S5.447A and S5.447B.

S5.458 In the band 6425-7075 MHz, passive microwave sensor measurements are carried out over the oceans. In the band 7075-7250 MHz, passive microwave sensor measurements are carried out. Administrations should bear in mind the needs of the Earth exploration-satellite (passive) and space research (passive) services in their future planning of the bands 6425-7025 MHz and 7075-7250 MHz .

S5.458A In making assignments in the band 6700-7075 MHz to space stations of the fixed-satellite service, administrations are urged to take all practicable steps to protect spectral line observations of the radio astronomy service in the band 6650-6675.2 MHz from harmful interference from unwanted emissions.

S5.458B The space-to-Earth allocation to the fixed-satellite service in the band 6700-7075 MHz is limited to feeder links for non-geostationary satellite systems of the mobile-satellite service and is subject to coordination under Resolution 46 (Rev.WRC-95)/No. S9.11A. The use of the band 6700-7075 MHz (space-to-Earth) by feeder links for non-geostationary satellite systems in the mobile-satellite service is not subject to S22.2.

S5.458C Administrations making submissions in the band 7025-7075 MHz (Earth-to-space) for geostationary-satellite systems in the fixed-satellite service after 17 November 1995 shall consult on the basis of relevant ITU-R Recommendations with the administrations that have notified and brought into use non-geostationary-satellite systems in this frequency band before 18 November 1995 upon request of the latter administrations. This consultation shall be with a view to facilitating shared operation of both geostationary-satellite systems in the fixed-satellite service and non-geostationary systems in this band.

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S5.511A Use of the band 15.43-15.63 GHz by the fixed-satellite service (space-to-Earth) (see Resolution COM5-8 (WRC-97)) and (Earth-to-space) is limited to feeder links of non-geostationary systems in the mobile-satellite service, subject to coordination under Resolution 46 (Rev. WRC-97)/No. S9.11A. In the space-to-Earth direction, the minimum earth station antenna elevation angle above and gain toward the local horizontal plane and the minimum coordination distances to protect an earth station from harmful interference shall be in accordance with Recommendation ITU-R S.1341. Also in the space-to-Earth direction, harmful interference shall not be caused to stations of the radio astronomy service using the band 15.35-15.4 GHz. The threshold levels of interference and associated power flux-density limits which are detrimental to the radio astronomy service are given in Recommendation ITU-R RA.769-1. Special measures will need to be employed to protect the radio astronomy service in the band 15.35-15.4 GHz.

S5.511C Stations operating in the aeronautical radionavigation service shall limit the effective e.i.r.p. in accordance with Recommendation ITU-R S.1340. The minimum coordination distances required to protect aeronautical radionavigation stations (No. S4.10 applies) from harmful interference from feeder-link earth stations and the maximum e.i.r.p. transmitted toward the local horizontal plane by a feeder-link earth station shall be in accordance with Recommendation ITU-R S.1340.

S5.511D Fixed-satellite service systems for which complete information for advance publication has been received by the Bureau by 21 November 1997 may operate in the bands 15.4-15.43 GHz and 15.63-15.7 GHz in the space-to-Earth direction and 15.63-15.65 GHz in the Earth-to-space direction. In the bands 15.4-15.43 GHz and 15.65-15.7 GHz, emissions from a non-geostationary space station shall not exceed the power flux-density limits at the Earth's surface of −146 dB(W/m^2/MHz) for all angles of arrival. In the band 15.63-15.65 GHz, where an administration plans emissions from a non-geostationary space station that exceed −146 dB(W/m^2/MHz) for any angle of arrival, it shall coordinate under Resolution 46 (Rev. WRC-97)/No. S9.11A with the affected administrations. Stations in the fixed-satellite service operating in the band 15.63-15.65 GHz in the Earth-to-space direction shall not cause harmful interference to stations in the aeronautical radionavigation service (No. S4.10 applies).

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UNITED STATES (US) FOOTNOTES

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US319 In the 137-138 MHz, 148-149.9 MHz, 149.9-150.05 MHz, 399.9-400.05 MHz, 400.15-401 MHz, 1610-1626.5 MHz, and 2483.5-2500 MHz bands, Government stations in the mobile-satellite service shall be limited to earth stations operating with non-Government space stations.

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NON-GOVERNMENT (NG) FOOTNOTES

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NG147 Stations in the broadcast auxiliary service and private radio services licensed as of July 25, 1985, or on a subsequent date following as a result of submitting an application for license on or before July 25, 1985, may continue to operate on a primary basis with the mobile-satellite service and the radiodetermination-satellite service.

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GOVERNMENT (G) FOOTNOTES

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G126 Differential-Global-Positioning-System (DGPS) Stations may be authorized on a primary basis in the bands 108-117.975 MHz, 1559-1610 MHz, and 5000-5150 MHz for the specific purpose of transmitting DGPS information intended for aircraft navigation.

PART 25--SATELLITE COMMUNICATIONS

1. The authority citation for Part 25 continues to read as follows:

AUTHORITY: Secs. 25.101 to 25.601 issued under Sec. 4, 48 Stat. 1066, as amended; 47 U.S.C. 154. Interpret or apply secs. 101-104, 76 Stat. 419-427; 47 U.S.C. 701-744; 47 U.S.C. 554.

2. The table and footnotes in paragraph 25.202(a)(1) are revised to read as follows:

§ 25.202 Frequencies, frequency tolerance and emission limitations.

(a)(1) *Frequency bands.* The following frequencies are available for use by the fixed-satellite service. Precise frequencies and bandwidths of emission shall be assigned on a case-by-case basis.

Space-to-Earth (GHz)	Earth-to-space (GHz)
3.7-4.2[1]	5.091-5.150[7,8]
6.700-7.075[7]	5.15-5.25[7]
10.95-11.2[1,2]	5.925-6.425[1]
11.45-11.7[1,2]	13.75-14.0[4]
11.7-12.2[3]	14.0-14.2[5]
15.43-15.63[7]	14.2-14.5
17.7-19.7[1]	15.43-15.63[7]
19.7-20.2	27.5-29.5[1]
	29.5-30.0

[1] This band is shared coequally with terrestrial radiocommunication services.

[2] Use of this band by the fixed-satellite service is limited to international systems, *i.e.*, other than domestic systems.

[3] Use of this band by the fixed-satellite service in Region 2 is limited to national and subregional systems. Fixed-satellite transponders may be used additionally for transmissions in the broadcasting-satellite service.

[4] This band is shared on an equal basis with the Government radiolocation service, grandfathered space stations in the Tracking and Data Relay Satellite System, and until January 1, 2000, spaceborne sensors.

[5] In this band, stations in the radionavigation service shall operate on a secondary basis to the fixed-satellite service.

[6] This band is shared coequally with broadcasting and broadcasting-satellite services. Terrestrial radiocommunications services must operate on a secondary basis.

[7] Use of this band by the fixed-satellite service is limited to feeder links of non-geostationary mobile-satellite systems.

[8] See 47 C.F.R. § 2.106, footnote S5.444A, for conditions that apply to this band.

PART 97--AMATEUR RADIO SERVICE

1. The authority citation for Part 97 continues to read as follows:

Authority: 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303. Interpret or apply 48 Stat. 1064-1068, 1081-1105, as amended; 47 U.S.C. 151-155, 301-609, unless otherwise noted.

2. Paragraph 97.303(m)(4) is revised to read as follows:

§ 97.303 Frequency sharing requirements.

* * *

(m) In the 5 cm band:

(4) In the 5.65-5.85 GHz segment, no amateur station shall cause harmful interference to, nor is protected from interference due to the operation of, stations authorized by other nations in the radiolocation service. In the 5.650-5.925 GHz segment, no amateur station shall cause harmful interference to, nor is protected from interference due to the operation of, Government stations authorized in the radiolocation service.

APPENDIX B: INITIAL REGULATORY FLEXIBILITY CERTIFICATION

The Regulatory Flexibility Act ("RFA")[1] requires that a regulatory flexibility analysis be prepared for notice and comment rulemaking proceedings, unless the agency certifies that "the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities." The RFA generally defines "small entity" as having the same meaning as the term "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act. A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).

This *Notice of Proposed Rule Making* ("*Notice*") proposes to allocate the 5091-5250 MHz and 15.43-15.63 GHz bands to the fixed-satellite (Earth-to-space) service on a primary basis, to allocate the 6700-7075 MHz and 15.43-15.63 GHz bands on a primary basis to the fixed-satellite (space-to-Earth) service, and to limit the use of these FSS allocations to feeder links that would be used in conjunction with the service links of non-geostationary orbit mobile-satellite service ("NGSO MSS") systems. We take this action on our own initiative in order to adopt domestically the NGSO MSS feeder link allocations adopted at the 1995 World Radiocommunication Conference ("WRC-95"). The adoption of this proposal would accommodate the growing demand for Big LEO services and would provide satellite operators with increased flexibility in the design of their systems.

The Commission has not developed a definition of small entities specifically applicable to the satellite services licensees here at issue. Therefore, the applicable definition of small entity in the satellite services industry is the definition under the Small Business Administration ("SBA") rules applicable to Communications Services "Not Elsewhere Classified."[2] This definition provides that a small entity is expressed as one with $11.0 million or less in annual receipts. According to Census Bureau data, there are 848 firms that fall under the category of Communications Services, Not Elsewhere Classified. Of those, approximately 775 reported annual receipts of $11 million or less and qualify as small entities.[3] The Census Bureau category is very broad and commercial satellite services constitute only a subset of its total.

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[1] The RFA, *see* 5 U.S.C. § 601 *et. seq.*, has been amended by the Contract with American Advancement Act of 1996, Public Law 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

[2] 13 C.F.R. § 121.201, Standard Industrial Classification (SIC) Code 4899.

[3] U.S. Bureau of the Census, U.S. Department of Commerce, 1992 Census of Transportation, Communications, and Utilities, UC92-S-1, Subject Series, Establishment and Firm Size, Table 2D, Employment Size of Firms: 1992, SIC Code 4899 (issued May 1995).

We estimate that -- using current technology -- up to four NGSO MSS systems could utilize the feeder uplink spectrum and that up to six NGSO MSS systems could utilize the feeder downlink spectrum being allocated in this proceeding. None of the Big LEO licensees is a small business because they each have revenues in excess of $11 million annually or have parent companies or investors that have revenues in excess of $11 million annually.

We therefore certify that this *Notice* will not have a significant economic impact on a substantial number of small entities. The Commission's Office of Public Affairs, Reference Operations Division, will send a copy of this Notice, including this certification, to the Chief Counsel for Advocacy of the Small Business Administration. A copy will also be published in the Federal Register.